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REDEFINING THE MILITARY ELEMENT OF NATIONAL POWER

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ABSTRACT

The military element of national power has arguably been the dominant factor by which a nation assesses its relative strength among the community of nations. Military strength generally determines the symmetric ability of one nation to impose its will upon another nation. Variables such as manpower and equipment provide a quantitative summary against which to judge military strength, while leadership, training, and morale are some qualitative variables of the military strength equation. Using this type of calculus in today's national security environment may not be an appropriate or sufficient way to gauge relative national power. Today, the ability of a nation's military to project itself, operate, and sustain itself throughout the spectrum of conflict frequently exceeds the boundaries of the "military element" of power. For example, the Gulf War and U.S. peace support operations in the Balkans, such as Joint Endeavor and Joint Guard, indicate the military's increasing reliance on contractors to support and sustain its forces. Not only are these non-military capabilities essential to the success of U.S. military operations, but they are typically discounted in any equation that assesses relative national military strength. Similarly, the defense against terrorism in the homeland relies on synergistic combination of many national non-military capabilities. Clearly the military has a role in securing the homeland, as it has done since the early days of the nation. The September 11, 2001 attacks against the United States, and the nation's actions since then, serve to illuminate capabilities that exist in the civil sector that form the first line of defense against, or in response to, terrorism's asymmetric threat. In this regard, the United States, or any other nation for that matter, relies predominantly on its civil law enforcement and response infrastructure to deter and defeat the terrorist threat or mitigate and manage the effects of any attack against the nation and its people. This source of national strength is critical in a strategic environment where weapons of mass destruction are proliferating and may be at the disposal of terrorists. Thus, this paper addresses the need to reevaluate and expand the concept of the military element of national power into a more suitable gauge of national strength -- the "socio-military" element of national power.

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REDEFINING THE MILITARY ELEMENT OF NATIONAL POWER

The military element of national power[1] has arguably been the dominant factor by which a nation exercises its relative strength among the community of nations. Nations can apply their military element quickly, and contrary to the other elements the results of this application are often immediate and very visible. Military strength generally determines the symmetric ability of one nation to impose its will upon another nation. Variables such as manpower and equipment can provide a quantitative summary against which to judge military strength, while leadership, training, and morale are some qualitative variables of the military strength equation. Using this type of calculus in today's national security environment, however, may no longer be an appropriate or sufficient way to gauge relative national power. Today, the ability of a nation's military to project itself, operate, and sustain its forces throughout the spectrum of conflict requires instruments outside of the boundaries of what we perceive to be the "military element" of power. For example, the Gulf War and U.S. peace support operations in the Balkans, such as Joint Endeavor and Joint Guard, demonstrate the military's increasing reliance on contractors to deploy, support, and sustain its forces. This paper will show that these non-military capabilities are not only essential to the success of U.S. military operations, but they are generally discounted in any equation that assesses relative national military strength.

Similarly, the defense against terrorism in the homeland relies on synergistic combination of many non-military capabilities. Clearly the military has a role in securing the homeland, as it has since the early days of the nation. The September 11, 2001, attacks against the United States, and the nation's actions since then, have served to illuminate capabilities that exist in the civil sector that form the first line of defense against, or in response to, terrorism's asymmetric threat. In this regard, the United States, or any other nation for that matter, relies predominantly on its civil law enforcement and response infrastructure to deter and defeat a terrorist threat, or to mitigate and manage the effects of any attack against the nation and its people. This source of national strength is critical in a strategic environment where weapons of mass destruction are proliferating and may be at the disposal of terrorists.

These two arguments, the military's ever increasing reliance on the civil sector to conduct full-spectrum operations, and the primacy of the civil sector as the primary instrument of securing the homeland, form the basis of this paper's thesis: there is a need to reevaluate and expand the concept of the "military" element of national power into a more suitable gauge of national strength -- the "socio-military" element of national power. This paper contends that contemporary descriptions of the military element of national power do not sufficiently address

the many non-military capabilities that support military forces during full-spectrum operations, nor does the current definition fully account for the strength of a nation to provide for the security of its homeland. A redefined "military" element of national power will provide military strategists with a better understanding of the elements and assets, both military and socio-civic, that they must incorporate into strategic planning, operational planning, or force structuring. To argue this thesis, the paper first reviews the contemporary definitions of the "elements" of national power, illuminating the "military element" of power. It then highlights several of the civil sector's capabilities that the military element relies on to conduct full-spectrum operations. Some recent military operations serve as examples of the military's increasing reliance on these capabilities. The paper then assesses the means by which the nation secures the homeland, thereby providing a perspective on the military's role in homeland security when compared to other elements. The paper concludes with a proposal for a "socio-military" element of national power. This redefinition of the military element will allow for a full and complete accounting of the element's civil-military resources and capabilities, allowing a strategist to more fully consider them in the pursuit of the nation's goals and interests.

THE ELEMENTS OF NATIONAL POWER

A typical dictionary definition of an "element" is a "fundamental, essential, or irreducible constituent of a composite entity."[2] Joint Publication 1, <u>Joint Warfare of the Armed Forces of the United States</u>, states that the elements of national power are the "tools the United States uses to apply its sources of power; including its human potential, economy, industry, science and technology, academic institutions, geography, and national will."[3] The U.S. Army War College teaches its students that the elements of power are the national-level "means" from which one can derive resources needed in developing strategy. The Army War College curriculum and Joint Publication 1 both cite four elements, or "constituents," of national power: diplomatic, economic, informational, and military.

The <u>diplomatic</u> element of national power is the principle means by which the United States engages other nations and foreign groups in order to advance its national interests and objectives. The <u>economic</u> element is representative of the means available to a nation to facilitate global market and trade relationships. National economic depth, breadth, and health, directly affect a nation's credibility and international influence. The <u>informational</u> element of national power is based on a nation's access to essential information, its capability to use information to achieve its ends, its ability to protect its information systems, and its ability to deny critical information that might be useful to an adversary. A nation's armed forces are the

primary instrument of its <u>military</u> element of national power. The strength of the armed forces as a means to national ends depends on its extent capabilities and core competencies and their ability to operate across a range of potential military environments.[4] The National Security Council plays a key role in weaving together the elements of national power at the strategic level. The elements typically do not function singularly. They are complementary and cooperative, often integrated to ensure unity of effort and purpose. One may view each element as an integral part of a "system of systems," a system that creates effects through the synergistic interrelationship of the parts. The military planner must understand the intrinsic instruments of each element, the nature of the relationships between the elements, and how to integrate them to advance U.S. values, interests and objectives.

At issue in this paper is whether military planners have a full and complete understanding of the intrinsic instruments of the military element, and the sufficiency of the description of the military element in Joint doctrine. In his article "National Power," David Jablonsky describes military strength as a "social determinant" of national power. He states that a nation's citizens determine how they will organize their military and under what circumstances they will apply their military strength. His brief description of the factors of the military element of power is both objective (personnel, equipment, and weaponry) and subjective (leadership, morale, and discipline).[5] While holistically useful, his description lacks depth and is devoid of many of the contemporary socio-civic elements that either directly support the military element of power, or indirectly complement it.

Similarly, the description of the military element in Joint Publication 1 is too general to be of great benefit to the military strategist. Joint Pub 1 cites the military element as consisting of the Armed Forces of the United States; one component of a synergistic national effort that involves all the elements of national power (diplomatic, informational, military, economic). More precisely, the military element consists of the Military Services, U.S. Special Operations Command, and Defense agencies. Each provides force capabilities that are the primary functional means of the military element of national power.[6] This description is precise in terms of the <u>sources</u> of "force capabilities," however it lacks clarity and specificity in its description of "force capabilities," their composition, and their non-DoD sources. Several other author's writings provide some of the required precision.

In <u>Games Nations Play</u>, John Spanier and Robert Wendzel consider the military element, or using their term, "military strength," as a function of quantitative and qualitative factors. Quantitative factors include the number of people in uniform and their weapons and equipment, the ability to mobilize and reinforce a nation's active forces, and the ability to project and sustain

forces. Qualitative factors include the quality and morale of the armed forces, the nation's technological capability, strategic leadership, and national military strategy.[7] Frederick H. Hartmann in The Relations of Nations decomposes the military element of national power into the size of its active and reserve forces, the size of the nation's military-age population, the nation's industrial capacity, and the quantity and quality of the military's weapons and equipment.[8] Both of these descriptions broaden the scope of the composition of the military element, and are complemented by Hans Morgenthau. In his book Politics Among Nations: The Struggle for Power and Peace, Morgenthau cites "military preparedness" as an element of national power. Morgenthau postulates that a nation's ability to pursue its foreign policy requires a military establishment that is superior to its contemporaries in technological innovations, strategic military leadership, and the quantity and quality of its armed forces.[9] Morgenthau cites the importance of a nation's heavy industry, and its transportation communications capacity and capabilities as essential determinants of waging modern war. However, his description of these elements does not include the light industry and services industry upon which the military has become so dependent. Indirectly, Joint Publication 1 addresses the capabilities to which Morgenthau and the other authors allude, but it does not describe in detail the sources of the force capabilities that make up the military element of national power.

    Most contemporary military operations require cooperation between the military and civilian governmental and private agencies. Joint Publication 1 lists these agencies as U.S. federal, state and local governments; international organizations; nongovernmental organizations (NGOs); private voluntary organizations (PVOs); and governmental or nongovernmental agencies of host nations and multinational partners.[10] Joint doctrine cites the need for early inclusion of "interagency considerations" in military assessments, estimates, and plans to enable civil-military integration of effort and unified action. However, the doctrine does not include civil-governmental or private agencies as an intrinsic part of the military element of power. Rather, joint doctrine places these agencies in an "associate" or "partnership" relationship with the military element of national power. These "socio-civil" sources of force capabilities are enablers of the element of military power cited in Joint Pub 1. In many cases they complement the DoD-sourced means cited in Joint Pub 1. In some cases they may constitute a means that directly mirrors a DoD-sourced force capability. In either case, the doctrine is unambiguous in the need for the military strategist to establish the relationship between these capabilities and the military element.

The contemporary military strategist can trace the source of several of these enabling or complementary means, or "force capabilities," to either the diplomatic, informational, or economic elements of national power, and can define the relationship that exists between these capabilities and the military element. For example, the Central Intelligence Agency provides threat assessments to combatant commanders. This action represents the relationship between an enabling capability of the informational element and the military element. In many other cases, there is no clear relationship of capabilities that reside in civil government, private agencies, or the commercial sector to any of the four elements of power. Many governmental agencies, NGOs, PVOs, and force capabilities that reside in the private sector have a clear relationship with the military element of power, yet they do not fall within the scope of any of the other three elements. Humanitarian relief organizations are an example of a capability not associated with any particular element of power, yet the military must cooperate with them in most of its operations. A reassessment of what instruments constitute the military element of national power will allow the military strategist to establish a full and unambiguous accounting of these force capabilities. This reassessment could lead to a redefinition of what constitutes the military element. Before arriving at this conclusion, it is useful to determine some of the force capabilities that might be best categorized as part of the military element of national power. Operations in the Persian Gulf War, in Bosnia during Operation Joint Endeavor, and during Operation Enduring Freedom in Afghanistan provide some examples of non-DoD force capabilities that lend significant support to the military element of power.

THE MILITARY ELEMENT OF POWER – "OTHER THAN MILITARY" CAPABILITIES

Today, private sector business and contractors constitute perhaps the most evident force capability that supports the military element. The private sector can augment military capabilities, expand the sources of supplies and services available to the military, and fill gaps in Service force structure. Privately owned businesses and contractors constitute a force multiplier that enhances the ability of the military to operate throughout the full spectrum of conflict.[11] The military has relied on contractors to provide supplies and services in support of military contingencies since the Revolutionary War. The types of contracted support has varied from teamsters and sutlers during the Revolutionary War and the War of 1812 to maintenance technicians of highly technical weapon systems used during Operation Desert Storm. Civilian telegraph operators supported both armies during the Civil War while today's Army relies on satellite communications and imagery capabilities used during Operation Enduring Freedom.[12] The active participation of the private sector and the support it provided to the U.S. military

during the 1990-1991 Persian Gulf War illuminates a means that the military element relied on during the war, and has continued to depend on since its conclusion.

THE PRIVATE SECTOR – A HISTORICAL VIEW

The ability of the private sector to enable the strategic movement of forces to the Persian Gulf in late 1990 and early 1991 is the most relevant example of the use of non-military capabilities in support of the military element of power. The use of the Civil Reserve Air Fleet (CRAF) during the Gulf War exemplifies one of the many critical cooperative programs between the DoD and the private sector in support of the military element. The Civil Reserve Air Fleet (CRAF) is a voluntary partnership between the DoD and commercial air carriers. It is designed to provide additional passenger and cargo planes and aeromedical evacuation services to the military during times of crisis when the need for airlift exceeds the capability of military airlift. The DoD called up Civil Reserve Air Fleet Stage I aircraft on August 17, 1990, to support deployments for Operation Desert Shield; a total of 17 international passenger aircraft and 21 international cargo planes. On January 17, 1991, the Secretary of Defense activated Stage II of CRAF, resulting in an additional 77 international passenger and 29 international cargo planes and their crews providing support to the military. The activated CRAF, combined with other cargo aircraft that carriers volunteered, transported nearly two-thirds of the military personnel and one-quarter of the cargo airlifted during the Gulf War.[13]

As of October 1998, 35 carriers and 657 aircraft were enrolled in the CRAF.[14] If a national emergency occurred today, commercial passenger planes would carry the vast majority of all military personnel who would be deployed to a major conflict. Under full mobilization, CRAF carriers would be capable of hauling up to 27.8 millions of ton-miles per day (MTM/D), although Air Force movement planners only rely on approximately 20.5 MTM/D cargo capacity. The latter figure represents two-fifths of the total theoretical airlift capacity of the military's strategic airlift fleet. The CRAF composes a significant part of the nation's mobility resources. Replacing the CRAF mobility capacity with military transport planes over the past 30 years would have cost DoD approximately $3 billion annually.[15] The CRAF allows DoD to fund other types of forces in the defense budget while avoiding costs of operating and supporting the CRAF during peacetime. The commercial aircraft that compose the CRAF, a key element of the airline industry, constitute a key force capability of the military element of national power.

The successful use of the CRAF for air movement of military forces provided a model for the DoD as it sought to establish a post-Gulf Waf program for sea surface movement of military forces and equipment. In the mid-1990s, the government and the commercial shipping industry

established the Voluntary Intermodal Sealift Agreement (VISA) to promote joint planning and assured military access to commercial shipping at pre-agreed rates during national emergencies. The VISA allows the DoD to use the ships and shore-based transportation systems of the commercial shipping companies in time of war. In return, the federal government subsidizes the shipping companies or gives them first consideration for defense cargo movement contracts. The VISA program also requires the DoD to provide commercial shipping agencies with information on the quantities and types of defense cargo slated for movement during contingencies. The program has improved access and communications between the DoD and the U.S. flagged commercial shipping industry making the commercial shipping companies and their assets an integral part of the military's contingency planning.[16] The Military Sealift Command (MSC) currently uses commercial readiness agreements with contractors for 32 percent of the total number of ships in the strategic sealift inventory required to haul dry cargo and 21 percent of the inventory's total number of tankers. An additional 22 percent of the tankers in the U.S. strategic sealift inventory are commercial assets not under a current readiness agreement.[17] Like the CRAF, the commercial shipping assets participating in the VISA program are key force capabilities of the military element of power.

Arguably a close second in importance to the DoD in terms of providing critical force capabilities in support of military sustainment are the civilian contractors that participate in the Logistics Civil Augmentation Program. The Army codified use of civilian contractors in December 1985 with the publishing of Army Regulation 700-137, Logistics Civil Augmentation Program (LOGCAP). The regulation affirmed the Army's need to preplan the use of civilian contractors for selected services in wartime to augment Army forces. This affirmation arose from the Army's recognition that the use of civilian contractors in a theater of operation would release military units for other missions or fill operational shortfalls.[18] The program uses civilian contractors to augment Army forces and provide selected engineering and logistical services during contingencies. The LOGCAP has allowed Army strategic planners to resolve combat support and combat service support unit shortfalls represented in operational plans. It has also provided them a means by which to consider reducing the number and type of existing support units within the Army's force structure based on availability of commercial contract support in contingency operations.

In 1992, the Army conducted a competitive selection for an umbrella support contract for military contingency operations under LOGCAP. The Army selected Brown and Root Services Corporation (BRSC) as its sole source contractor. In December 1995, the Army used this contract to build base camps and provide essential services for its forces engaged in Operation

Joint Endeavor (OJE), the NATO-led Bosnia peace enforcement operation.[19] The LOGCAP augmented the OJE theater logistics structure by providing support that included: equipment and personnel transportation, bulk water and fuel distribution, food service, laundry service and tailoring, construction of showers and latrines, trash and garbage removal, hazardous materials disposal, maintenance of organizational clothing and individual equipment, and most significantly, base camp construction and support of reception, staging, onward movement and integration. The U.S. Army, Europe's (USAREUR) use of LOGCAP and BRSC during Operation Joint Endeavor was the sixth time that the Army had used BRSC for military support since 1992. Initially, Brown and Root assisted in the construction and maintenance of base camps, and provided field services, supply and laundry services, and water production. Brown and Root augmented USAREUR with capabilities that offset the operational need for six heavy combat engineer battalions, 54 service/supply platoons, and 24 water purification detachments, an estimated 8,123 soldiers. Additionally, BRSC handled and disposed of hazardous material, refuse, and sanitary waste, performing tasks that no Army unit is specifically designed to execute.[20]

In September 1996, the DoD awarded BRSC a $471 million change order to the LOGCAP contract to provide a full range of logistics and construction support to U.S. Army forces deployed to Hungary, Croatia, and Bosnia in support of OJE. Under this contract change, BRSC continued to construct and upgrade temporary troop housing, and maintained the full range of supply and service functions that it had been providing since late November 1995.[21] Brown and Root also played a key role during the transition of the mission in Bosnia from Operation Joint Endeavor to Operation Joint Guard (OJG). It assisted in the reception, staging and onward movement of 1st Armored Division soldiers as they redeployed to Germany and soldiers from the 1st Infantry Division as they assumed the mission in Bosnia. During the OJE-OJG reduction of forces, Brown and Root assisted military engineers in the dismantling of 14 of Task Force Eagle's 25 base camps, in the recovery and stewardship of base camp materials, and in the movement of several existing camps.[22]

In May 1999, the government awarded BRSC what is termed the "Balkans Support Contract." This contract requires BRSC to provide a wide array of support and services throughout the Balkans, including food preparation and service, laundry service, logistics and transportation support, building large portions of the base camps in Kosovo, and performing various construction projects as directed by the Army. In fiscal year 1999, BRSC provided 100% of the maintenance, food service, laundry service, base camp sewage treatment, hazardous material handling and disposal, and mail support for military forces deployed in

Bosnia and Kosovo. It also provided 75% of the construction, 80% of fuel support, 75% of the heavy equipment transport missions, and 90% of the water provision.[23] The DoD has increasingly relied on contractors rather than soldiers to provide some basic services in the Balkans, especially as it reduced force levels. The Army has contracts with more than 100 firms to obtain needed goods and services in the Balkans. Through March 2000, contract services represented over $2.1 billion of the $13.8 billion that the Defense Department spent on operations in the Balkans.[24]

The U.S. military's dependence on contractors for support has increased markedly over the past decade.[25] The reasons for increased reliance on contractors range from an upward surge in the tempo of military deployments, reductions in the U.S. military's force structure, Congressionally mandated troop ceilings during military operations, and a DoD emphasis on functional task outsourcing.[26] The Army's recent development of policy and doctrine on the role and use of contractors is further evidence of the Army's increased reliance on contractor support during contingency operations. Army Regulation 715-9 (Contractors Accompanying the Force), Field Manual 100-21 (Contractors on the Battlefield), and Field Manual 100-10-2 (Contracting Support on the Battlefield) fill a void in direction and guidance that a 1994 Rand study identified as an operational support deficiency during Desert Storm.[27] The private contractor has supported the Services throughout the entire history of the U.S. military, however their support has increased over the past decade, and will continue to do so as they become more specialized and the Services become more dependent on them.

Private sector force capabilities provided during the Gulf War and in support of peacekeeping operations in the Balkans show how critical contracting and outsourcing have become as an intrinsic way of executing the military element of power. Force capabilities such as the CRAF, the VISA program, and the LOGCAP generally enable military instruments within the military element to achieve their objectives. In addition to these enabling capabilities, the private sector and other government agencies have developed force capabilities that are complementary to military instruments of the military element. Many of these complementary force capabilities do not always constitute an obvious instrument of any of the four elements of national power. Peacekeeping operations in the Balkans provide an example of how the private sector has created capabilities that perform a mission that was previously only suited to the military. In the Federation of Bosnia and Herzegovina Train and Equip Program, the U.S. used a contractor to provide a "military-like" capability that was more an exercise in diplomacy than military power. Additionally, operations that the Central Intelligence Agency conducted in Afghanistan during Operation Enduring Freedom depict how a government agency has

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expanded its own force capabilities to conduct military-like missions. Each of these examples highlight non-DoD governmental actors and private sector organizations that the military strategist must recognize and take into account when formulating the instruments and capabilities available to the exercise of the military element of power.

The Federation of Bosnia and Herzegovina Train and Equip Program illustrates how the private sector executed a peacetime engagement mission that military forces have exclusively performed in the past. Formally initiated in July 1996 and concluded in October 2002, the U.S. managed "Train and Equip Program" was a key component of the military and security aspects of the Dayton Peace Accord.[28] Under the program, the U.S. contributed approximately $100 million in defense equipment including tanks, heavy artillery, armored personnel carriers, light anti-tank weapons, utility helicopters, rifles, machine guns, and radios to a $500 million multinational effort to foster a comprehensive approach to military stabilization in Bosnia. The primary U.S. contractor for this effort was Military Professional Resources, Incorporated (MPRI), which had already conducted military training programs in Croatia. MPRI provided training to the Federation armed forces in order to encourage Bosniac compliance with the Dayton arms control agreement, provided institution building within the Federation defense ministry and armed forces, and promoted deterrence by establishing parity between the Federation Armed Forces and the Bosnian Serbs' military forces.[29] MPRI assisted in the development of the Federation's military structure, helped field military equipment, and conducted a broad-based individual and unit training program.[30]   The Clinton Administration was able to use MPRI as a surrogate military training cadre during the days when the U.S. troop contribution to OJE was at 20,000 soldiers in Bosnia and Croatia, and several thousand other soldiers were supporting OJE from Hungary and Germany. Thus, MPRI provided a complementary force that would normally require employment of a significant number of U.S. military forces.

THE GOVERNMENT SECTOR – THE CIA
In the government sector, the CIA serves as an example of a government agency that has developed force capabilities that enable and complement military elements. Since the Gulf War, the CIA and the U.S. military have followed parallel paths to combine their complementary means in the war on terrorism. Both communities have emerged from this 10-year trial with some characteristics of the other. The military has focused on network-centric warfare and information dominance while the CIA has increasingly engaged in paramilitary operations in the field.[31] The convoluted nature of the global war on terrorism requires each to collaborate in operational planning and information sharing. In the past, geographic boundaries and

organizational capabilities served to define the degree of CIA-DoD collaboration. The nature of the operating environment in Afghanistan and the complementary capabilities that the CIA has developed since Desert Storm have made the CIA a more active partner with the military forces in Afghanistan. While the CIA's capabilities add considerable synergy to the war on terrorism, the net result of Agency's efforts has blurred the traditional mission boundaries between it and the military.

A key strength that the CIA provides to any military operation in a theater of operations is the agency's knowledge of the terrain, the long-term relationships that it establishes, and its understanding of the issues of the indigenous people. The CIA's foreign intelligence collection program mandates full-time operator presence in a combatant commander's theater, a benefit that a commander can exploit and one that requires mutual, collaborative interface.[32] The peacetime support that the CIA provides to the DoD depicts this interface. The CIA provides combatant commanders with direct access to its products and services, where appropriate. The Agency has nearly 100 officers primarily devoted to supporting military operations, 15 of which are senior intelligence service officers. Additionally, the CIA has officers located in each combatant command headquarters who provide personalized services to the staff and command, as well as intelligence liaison directly to the agency. In the event of a crisis, the CIA assembles crisis support teams that act as part of interagency teams chartered by the Joint Staff, or that can be devoted to support DoD-established joint task forces. Lastly, the CIA and DoD have enhanced their connectivity over the past two years through the fusion of a CIA network, known as CIA Source, with the Joint Worldwide Intelligence Communications System (JWICS). This integrative effort provides more than 200 military customers with direct access to finished intelligence on CIA databases.[33] The CIA has also supported Operation Enduring Freedom through the deployment of a computer web-based, collaborative common virtual workspace. This system provides secure dissemination of both raw and processed intelligence to combatant commanders and other government agencies, and has provided timely indicators and warnings of impending terrorist actions against U.S. military forces.[34]

In recent years the CIA has expanded its responsibility for strategic warning and coordination of clandestine operations abroad to also include direct support to military forces engaged in contingency operations. The CIA's support of U.S. military strategy and combat operations in Afghanistan during Operation Enduring Freedom (OEF) demonstrates its expanded mission. During OEF, the CIA used paramilitary teams cooperatively with U.S. Special Forces to gather tactical intelligence. The CIA's teams provided targeting data to Special Forces teams, and assisted in training and guiding the efforts of the anti-Taliban Afghan

forces. The CIA was also successful in using Predator unmanned aerial vehicles fitted with missiles to attack Taliban and Al Qaida forces and leadership.[35] The New York Times report of a CIA strike against a senior Al Qaida operative in Yemen on November 3, 2003, illustrates an attack that blends CIA surveillance and strike operations with military operations in Central Command's theater of operations.[36]

United States military operations during the Persian Gulf War, in the Balkans, and in Afghanistan show that the use of the military element of national power includes capabilities that go beyond those cited in Joint Publication 1. Non-DoD agencies like the CIA, and private sector businesses such as BRSC and MPRI, have developed force capabilities that significantly empower and complement military forces. Many respected authors and joint doctrine writers have generally not considered these types of socio-civic force capabilities as intrinsic instruments of the military element of national power. In this context, the notion of what fully constitutes the military element goes beyond the intra-DoD elements cited in Joint Pub 1 and potentially justifies a more inclusive term, the "socio-military" element of power, that encompasses all of the capabilities that enable or complement military forces. The strategist's attempt to apply the contemporary, Joint Pub 1 view of the military element to the security of the homeland further substantiates the proposition for redefining the military element as the socio-military element of power.[37]

THE ELEMENTS OF NATIONAL POWER AND HOMELAND SECURITY

The elements of national power cited in Joint Pub 1 are particularly useful when applied to the domain of nation state-on-nation state interaction. As the "tools" by which the U.S. applies its sources of power, the elements of power provide strategic planners with a construct by which to assess the relative strengths and capabilities, or weaknesses, of a nation. This construct, however, is incomplete in its relevancy when applied to the security of the homeland. The July 2002 National Strategy for Homeland Security defines homeland security as the "concerted national effort to prevent terrorist attacks within the United States, reduce America's vulnerability to terrorism, and minimize the damage and recover from attacks that do occur.[38] As a "concerted national effort," the diplomatic, informational, economic, and military elements are available to the strategist in the planning and execution of homeland security. Some of the four elements are more applicable and relevant to the development of a homeland security strategy. What the Joint Pub 1 description of the elements lacks, however, is full accountability of the vast number of force capabilities essential to, and available for, the internal security of the nation. An examination of each element as it applies to homeland security exposes this shortcoming. The

proposed "socio-military" element of power solves this accountability problem by identifying and integrating the elements of the nation's homeland security apparatus into one element of power.

The diplomatic element is absolutely critical to galvanizing international cooperation needed to combat threats to the U.S. homeland. However, the diplomatic element of power is fundamentally applied at, or beyond, the borders of the United States. Instruments of the diplomatic element secure international law enforcement cooperation. The diplomatic element provides a bridge by which the United States takes the fight to those entities in distant lands that would attack the homeland directly through terrorism. It encompasses the work that U.S. officials conduct with international trade partners to increase the security of shipping containers, to improve the standards by which other countries issue passports and visas, or to freeze the assets of suspected terrorist groups and their benefactors. The diplomatic element, however, does not adequately describe the government's or the private sector's active efforts within the borders of the U.S. to secure the homeland.

The informational element of power goes much farther than the diplomatic in its ability to describe many of the efforts to secure the homeland within its borders. Information, its sharing or security, contributes to every aspect of homeland security. The ability of the United States to protect critical information and information systems from an enemy is crucial to national security. Additionally, the U.S. is investing a great deal of effort and resources toward the integration of information sharing among state and local governments, private industry and citizens, and the improvement of public safety communications in order to stay on the leading edge of information dominance.[39] To this end, the management and protection of information assists in a variety of homeland security domains from law enforcement to intelligence, border management to critical infrastructure protection, and from incident management to the protection of sensitive, classified information and information systems.

The economic element is perhaps the most critical to the security of the homeland. It is relevant by virtue of the means it provides to new or existing programs needed to secure the homeland. Not only does the economic health of the United States define its ability to influence international partners in the war on terrorism, but it also represents the nation's ability to absorb the effects of a catastrophic attack on the homeland. The economic stability and vitality of the United States enabled the President and Congress to appropriate $40 billion in emergency funds to compensate victims of the September 11 attacks.[40] It has enabled massive reconstruction aid to New York and Northern Virginia, and has given the administration the ability to execute the most comprehensive change in U.S. government structure since the Truman Administration created the National Security Council and the Department of Defense.

While the economic element is also used to assess a nation's impact on the global market and facilitate trade relationships, it can also comparatively assess a nation's ability to secure its homeland.

The military element of power is also a relevant means by which to assess a nation's ability to secure its homeland. The size of a nation's armed forces, its ability to project power, and the technology that it wields all serve to determine the relative strength of a nation's military element against an adversary. These factors also determine a nation's ability to protect its borders and defeat an aggressor's attack. The agility of a nation's armed forces defines its ability to defeat both symmetric and asymmetric threats to its homeland. However, one must consider other force capabilities that do not fit well within the Joint Pub 1 description of the military element, or the other three elements for that matter, when assessing a nation's relative ability to protect the homeland.

THE HOMELAND SECURITY TRIAD

Securing the homeland encompasses every level of government and the cooperation of the public and private sectors. Homeland security is a vital national interest, and is a product of the expertise and commitment of state and local governments, agencies and organizations. Government at all levels provides the necessary funding to operate emergency services. Local governments serve as a repository of community knowledge and information. They serve as the primary mechanism that coordinates local response forces, while working deliberately to integrate and synchronize their homeland security plans and efforts with the other levels of government. Local and state government, the private sector, and the departments, agencies, and organizations of the federal executive branch form the primary variables in the equation that defines the efficiency and effectiveness of the nation to protect itself against attacks to the homeland.[41] Each of the variables is an integral part of the equation, and each depends upon the others to fill gaps in capability and minimize redundancy. When in proper balance, these variables produce a synergy that reduces the threat of attack to the United States or provides a rapid, effective, and sufficient response that mitigates the effects of an attack and enables a quick recovery.

Local, state, and national government serves as the primary facilitator that manages the variables required for adequate and effective homeland security. At all levels, emergency management agencies ensure that their systems and response plans are able to cope with all security hazards, including terrorism. These agencies ensure that the medical system has the capability to deal not only with bioterror, but all infectious diseases and mass-casualty dangers.

They work cooperatively to guarantee that the United States is able to control its borders so that it can prohibit terrorists from entering the country while simultaneously allowing the legitimate free-flow of people and trade.[42] The agencies and departments of the executive branch are a key and integral part of the homeland security equation. Over 100 federal agencies and organizations have responsibilities, or a stake, in homeland security.[43] They are integral parts of the President's constitutionally-based responsibility to protect the nation's citizens. As such, they develop and execute the President's policies and programs, enforce federal laws, and in many cases provide distinct means and a division of labor whose primary purpose is to protect the nation's infrastructure and people. No single agency or organization can manage this entire effort. Successful execution requires a synergistic effort at, and among, all levels of government, and between all elements of national power. Local and national government orchestrates the homeland security efforts of local municipalities, states, and federal agencies through cooperative efforts, synchronized and coordinated plans and preparations, and the development of complementary and, where needed, redundant emergency response capabilities. The orchestration of these efforts and capabilities ensures that the nation has the ability to detect, defeat, or respond to attacks against the homeland, especially terrorist attacks.

The nation's first line of defense against any terrorist attack is the "first responder" community composed of local and state police, firefighters, and professional emergency medical personnel. This community of responders forms the nation's greatest potential to save lives and limit casualties in the event of a terrorist attack. While local and state first responder capabilities vary widely, there is no doubt they form a formidable homeland security backbone.[44] According to the U.S. Census Bureau's 2001 Statistical Abstract of the United States, there are over one million firefighters in the United States, and 16,661 local police, state police, and sheriff offices composing 932,780 law enforcement personnel. The nation's local medical response capability is made up of almost 7000 hospitals and 155,000 nationally registered emergency medical technicians.[45] Over 600 local and state Hazardous Material (HAZMAT) teams exist in the United States providing local and state organizations the ability to assess and act on incidents that involve highly toxic chemicals and hazardous materials.[46] Local first responders are critical during a fully integrated national response to a weapon of mass destruction (WMD) catastrophe. First responders maintain order at the scene, provide life-saving first aid and triage, they contain the effects of a WMD, and they initiate an investigation of the attack. Federal civilian agencies become involved in a response to a WMD event only when circumstances are beyond the training, expertise, or equipment of first responders. The federal government's capabilities

complement those of first responders, and they illustrate the significant strength that the United States wields in its ability to secure the homeland.

The National Security Council (NSC) is the interagency coordinator for national policy on combating terrorism and federal support in response to a major disaster or WMD event. The NSC's National Coordinator for Security, Critical Infrastructure, and Counterterrorism integrates the government's policies on unconventional threats to the homeland. Policy and action regarding homeland security are divided along two efforts: crisis management and consequence management. The Department of Justice (DoJ) is the Lead Federal Agency responsible for crisis management. As such, the DoJ identifies, acquires, and plans the use of resources required to prevent an act of terrorism or resolve the act from a law enforcement perspective. The DoJ has delegated operational responsibility for this mission to the Federal Bureau of Investigation (FBI). The DoJ's Hazardous Materials Response Unit (HMRU) supplements the FBI during its investigations by providing laboratory, scientific, and technical assistance, and currently has 15 teams in 56 of the FBI's field offices. The FBI assists local first responders through training and advice, threat assessment and consultation, and WMD technical support. Response assets within the FBI include the Critical Incident Response Group (CIRG). The CIRG integrates the tactical and investigative expertise necessary to deal with terrorists. It consists of crisis managers, hostage negotiators, behaviorists, and surveillance assets. Response capabilities that the CIRG can rely on include the Bureau's Hostage Rescue Team, Special Weapons and Tactics Units, and an array of response teams resident in other federal agencies.[47] While the events of September 11 highlight deficiencies in the nation's ability to counter terrorism, the federal government still retains significant force capabilities to detect, defeat and respond to acts of terrorism. The ability to manage and mitigate the effects of a successful terrorist attack is just as significant.

Although state and local governments are primarily responsible for managing the consequences of a terrorist attack, their capabilities may become overwhelmed. Should state or local authorities request assistance, the Federal Emergency Management Agency (FEMA) would coordinate the response and action of federal agencies through the Federal Response Plan. The federal government can provide considerable assets to assist state and local first responders. Eight federal agencies can provide 24 different types of response teams that are capable of responding to a weapon of mass destruction event.[48] While there are numerous federal response teams, they tend not to duplicate each other. Each team has a unique set of capabilities and functions, and generally no single team has all the capabilities that might be required to assist in mitigating the consequences of a WMD event. Several federal teams

typically respond to specific types of events because of the expertise they have concerning the type of weapon used in an attack. While this system of response might seem unwieldy, federal agencies would still need most of their response teams to execute other functionally specific missions. Additionally, most federal agency response teams are long-standing and have purposes other than consequence management, such as responding to natural disasters or hazardous material spills. Singularly, these federal agencies provide capabilities that are essential to public safety and consequence management. In concert with each other and the capabilities of first responders, they create a synergy that many other nations cannot match. The Department of Health and Human Services is one example of the unparalleled strength of the U.S. Federal Government and the assets that it wields in the security of the homeland.

HEALTH AND HUMAN SERVICES – A CASE OF THE FEDERAL GOVERNMENT BULWARK

The Health and Human Services (HHS) is the primary federal agency responsible for the health and medical response under the Federal Response Plan. As such, the HHS addresses the medical and public health consequences of all types of mass casualty events whether caused by terrorism, accident, or nature. The HHS conducts a variety of activities to prevent, identify, and respond to incidents of bioterrorism. These activities include epidemic detection and response, maintaining and securing the National Pharmaceutical Stockpile, performing research to improve methods, training, and delivery of health care service, and assisting local, state, and other federal agencies in improving their emergency response capabilities. The HHS administers these activities through the Centers for Disease Control and Prevention (CDC), the National Institutes of Health (NIH), the Office of Emergency Preparedness (OEP), the Health Resources and Services Administration (HRSA), the Substance Abuse and Mental Health Services Administration (SAMHSA), the Agency for Healthcare Research and Quality (AHRQ), and the Food and Drug Administration (FDA). Each of these activities has unique capabilities and programs that lend themselves to a more secure homeland.

For example, the CDC maintains three programs that contribute to a robust response infrastructure at federal, state and local levels. The first program that the CDC manages is the Health Alert Network (HAN), a nationwide, integrated, electronic communications system for public health professionals to share advisories, distance learning, laboratory findings, and other information relevant to disease outbreaks. The second program is the Laboratory Response Network (LRN), a partnership program among the Association of Public Health Laboratories, the CDC, the FBI, state public health laboratories, the DoD, and the nation's clinical laboratories. The LRN ensures that the highest level of containment and expertise in the identification of rare

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and lethal biological agents is available in an emergency. The third program is the Epidemic Information Exchange System (Epi-X). The Epi-X is a secure, worldwide web-based communications network that strengthens bioterrorism preparedness efforts by facilitating the sharing of preliminary information about disease outbreaks and other health events with officials across various jurisdictions.[49] These three programs have created a network of health care professionals that enables information sharing, collaborative diagnosis, and local-to-national warning of a possible bioterrorism outbreak, all of which are essential to homeland security.

There are several other examples of HHS' significant contribution to homeland security. The HHS Office of Emergency Preparedness (OEP) provides assistance at the local and state levels through top-to-bottom development of the Metropolitan Medical Response System (MMRS). The MMRS uses existing emergency response systems, emergency management, medical, and mental health providers, public health departments, law enforcement, fire departments, and the National Guard to provide an integrated, unified response to a mass casualty event. The OEP has contracts with 122 municipalities to develop MMRS for bioterrorism-related planning and help them improve their medical related capabilities. The OEP also coordinates the National Disaster Medical System (NDMS), a group of more than 7000 volunteer health and support professionals. The OEP can deploy these critical personnel throughout the United States to assist communities in which local response systems are overwhelmed or incapacitated. These volunteers provide on-site medical triage, patient care, and transportation to medical facilities.[50]

The CDC's establishment and management of the National Pharmaceutical Stockpile (NPS) is an example of a HHS strategic capability essential to homeland security. The NPS provides the federal government the ability to rapidly respond to a biological or chemical event with antibiotics, antidotes, vaccines, and medical materiel to help save lives and prevent further spread of disease. The NPS provides an initial response of potentially 12 pre-configured loads of pharmaceutical supplies stored on semi-trailers, known as "Push Packs." The CDC can deploy any of the Push Packs within 12 hours of an identified need, and can then develop a prompt and more targeted response as dictated by the type of event. The Push Packs, complemented by large quantities of additional pharmaceuticals stored at manufacturers' warehouses, have enough drugs to treat up to 12 million persons to prevent inhalation anthrax. During 2002, the CDC increased the total inventory in the NPS to over 600 tons of supplies.[51]

Another HHS program that supports homeland security from local to federal level is the FDA's cooperative effort to strengthen the nation's food safety system across the entire distribution system. This effort consists of effective prevention programs, new surveillance

systems, and faster foodborne illness outbreak response capabilities, all designed to protect the safety of the nation's food supply against natural, accidental, and sabotage threats. The Department of Agriculture provides the surveillance infrastructure of the program, while the CDC, in cooperation with state and local health departments, conducts surveillance for foodborne illnesses.[52] This effort protects the nation's food supply and provides a means by which to maintain the public's confidence in the safety of its food.

Like the HHS, many of the federal departments and agencies contain capabilities critical to the security of the homeland. The Department of Energy (DOE) maintains 24-hour access to personnel and equipment for radiological emergencies through the Radiological Assistance Program. The DoE also maintains teams of engineers, scientists, and technical specialists who can deploy with equipment within four hours to assist the FBI in handling a nuclear or radiological event. The Environmental Protection Agency (EPA) also prepares for, and responds to, emergencies involving radiological threats. The EPA has approximately 270 on-scene coordinators available across the U.S., two Environmental Response Teams, ten Superfund Technical Assessment and Response Teams, and 12 environmental laboratories, all supported by the EPA's National Enforcement Investigation Center. The Department of Homeland Security (DHS) is responsible for protecting airports and responding to terrorist attacks on transportation hubs. Within the DHS, the Coast Guard is the lead agency to handle incidents that occur in coastal waters. It maintains three National Strike Force teams that are capable of handling major oil and chemical spills, but can also handle HAZMAT related terrorist events.[53] Each of these examples represent some of the very significant capabilities that the U.S. government has developed to respond to events that threaten the health and safety of the nation and its people. They complement the capabilities of local and state agencies and offices, and form a vast and robust response means in the event of an attack against the United States.

FILLING THE GAPS IN GOVERNMENT – THE PRIVATE SECTOR

The private sector helps fill homeland security gaps that government at any level cannot address. Composed of business, industry, and academia, the private sector is a source of innovation and ideas that produces technological, scientific, and systemic solutions to terrorist threats.[54] The private sector also maintains a vast source of materiel that it can provide quickly to federal response teams, local first responders, or to a general stockpile to help private citizens who are the victims of an attack or a disaster. The September 11, 2001, attacks against the World Trade Center provide two examples of how the private sector participates in the security of the homeland.

Shortly after the terrorist attacks, AT&T contributed part of the more than 200 shipping containers of emergency response telecommunications equipment that it maintains in the event of a disaster in the United States. This contingency stock is maintained in a constant state of readiness and is air-transportable anywhere in the United States. Like AT&T, Home Depot responded to the attacks in New York and at the Pentagon. Within 90 minutes of the first attack, Home Depot established emergency command centers in New York and Washington. It ordered 20 of its New York and national capital area stores to be closed to the public so that it could preserve a dedicated inventory of supplies for the recovery effort. By September 18, Home Depot provided more than 300,000 emergency items to Ground Zero ranging from custom saws and air compressors to hard hats and duct tape.[55] Private sector ownership of approximately 85 percent of the nation's critical infrastructure establishes this sector as the primary guardian of the means and systems that sustain America's communities and population.[56] The investment that the private sector has in the nation's critical infrastructure creates a marked incentive for it to bear a significant burden of the costs required to secure infrastructure property and occupants. As such, the private sector is a key stakeholder in homeland security, it is a primary variable in the aggregate homeland security equation, and it should be inclusive of some element of national power.

THE ROLE OF THE ARMED FORCES IN HOMELAND SECURITY

Like the private sector, the U.S. Armed Forces, including the Coast Guard, are an essential element of an integrated effort to secure the homeland. Military forces have roles in two aspects of homeland security – homeland defense and military support to civil authorities. The military defends the homeland by conducting military operations across the full spectrum of conflict to "protect U.S. territory, sovereignty, domestic population, and critical infrastructure against external attacks and aggression."[57] These operations are externally focused and conducted in depth against a range of possible threats with the objective of denying an enemy's access to the Nation's land, maritime, air, and space approaches. Conversely, the military also plays a key role in the security of the homeland at and within its borders.

In his testimony before the House Select Committee on Homeland Security, Secretary of Defense Donald Rumsfeld cited three circumstances in which the Department of Defense would be involved in activity to secure the homeland. The first circumstance involves the execution of traditional military missions that the Department would coordinate with the National Security Council and the Department of Homeland Security. Some of these missions might include combat air patrols over various metropolitan areas, maritime defense operations, or national

missile defense. The Department of Defense would typically take the lead in defending U.S. territory and citizens, and other agencies would provide support to this end. The second set of circumstances includes the government's responses to catastrophic events, such as a major terrorist attack or natural disasters. In these cases, the DoD would provide personnel expertise, material, and equipment that other agencies do not have in their own organizations. Lastly, the DoD will provide support to other agencies that have the lead for a particular event, such as security at the 2002 Winter Olympics, where the support is limited in scope and duration.[58] Secretary Rumsfeld's testimony indicates a clear role for the military in the defense of the homeland. The military will generally act in support of other agencies in events other than a direct military attack on the United States and its citizens. The civil sector, not the military, essentially acts as the first line of defense against most threats to the homeland, especially asymmetric threats.

The nation's civil sector and its support infrastructure contain the vast majority of the force capabilities that the nation requires for homeland security. Federal departments and agencies create a vast network of homeland security capabilities that the lead agencies for crisis management and consequence management, the FBI and FEMA, can call on to respond to or defeat an attack against the homeland. The nation's police and firefighters provide local level first responders that are critical to the mitigation of the consequences of a terrorist attack on the United States and its citizens. The Federal government also maintains the ability to respond quickly to such attacks. The Department of Energy's Emergency Response Teams are an example of a non-military rapid response force capable of reacting to a threat against a nuclear power facility. The Federal Bureau of Investigation is absolutely critical to the nation's security against terrorist organizations and their threats. The structure of the nation's Federal Response Plan portrays the lead role that many Federal agencies play in homeland security, and how the military element plays a supporting role in this effort.

The concepts and capabilities that establish a more secure homeland as addressed in the National Strategy for Homeland Security and the Federal Response Plan illustrate the primary role that the civil sector has in homeland security. This conclusion is not intended to downplay the role that the military element of national power plays in securing the homeland. The military demonstrates the key role it plays in homeland defense by fighting the war on terrorism overseas. Additionally, its redundant, low density response and mitigation capabilities, such as those commanded by U.S. Northern Command's Joint Task Force Civil Support, exhibit the critical supporting role it has in consequence management. It is, however, not the first force capable of responding to threats or attacks against the homeland, nor should it be given its

primary role to fight and win the nation's war. The military element, by constitutional design and by historical precedent, is a supporting element in the nation's homeland security strategy. The civil sector, and the force capabilities that it provides, rightly comprises the primary "element" of national power necessary for a comprehensive homeland security strategy. The civil sector, when combined with the redundant or specialized force capabilities of the military element, forms a "socio-military" element of national power that encompasses the ability of the nation to adequately defend itself against direct attacks to the homeland and to its interests overseas.

REDEFINING THE "MILITARY ELEMENT" OF NATIONAL POWER

The definition of the military element of power as contained in Joint Publication 1 has been in need of revision and redefinition for some time. United States military operations have become a composite of force capabilities beyond those in the military. The military element has more accurately become a combination of military and socio-civic capabilities. Recent military operations during the Gulf War, in the Balkans, and the on-going Operation Enduring Freedom, indicate an ever increasing synergy between the military, other governmental agencies, and the private sector. The trend in military operations has been toward inclusion rather than exclusion of force capabilities that have their source outside the military. The decrease in the ratio of soldiers on the battlefield to contractors on the battlefield from 50:1 during the Gulf War to 10:1 during Operation Joint Endeavor indicates just how indispensable contractors have become to the military. Private contractors are conducting operations against Colombian drug traffickers and training militias in Africa and the Balkans.[59] As a smaller military force has increased its tempo of military operations and training, so has its reliance on contractors to complement its capabilities. Joint doctrine mandates cooperation with other governmental agencies, non-governmental agencies, and private-volunteer organizations. The need for this cooperation continues to increase in importance as agencies such as the CIA develop complementary force capabilities, or as the military increases its reliance on the private sector for deployment and sustainment of military forces in operational theaters. As the military becomes more dependent on the cooperative force capabilities of other agencies or the private sector, so to is the need to recognize the criticality of these capabilities and their sources.

THE IMPACT OF THE PRIVATE SECTOR ON THE MILITARY ELEMENT OF POWER

The challenges that currently confront the airline and maritime industries serve as examples of this interdependent relationship and how the commercial sector's problems can significantly affect the military and its ability to conduct operations. The Air Transport Association's 2002-2003 State of the Airline Industry: A Report on Recent Trends for U.S.

<u>Carriers</u> highlights many of the problems that commercial airlines have faced since September 11, 2001. According to this report, the airline industry is facing huge financial solvency problems brought on by a sharp downturn in air travel, the rising cost of airline fuel, increased security costs, and massive increases in insurance costs. These post-September 11 effects have caused unprecedented industry losses, as much as $17 billion in 2001 and 2002, and have forced major U.S. airlines to fire more than 70,000 workers.[60] The financial problems of the industry's major carriers could become worse in the near-term, especially if the U.S. becomes embroiled in an extended war with Iraq.[61] The industry's problems have forced the airlines to initiate actions that could markedly affect the Department of Defense and its ability to fight a major war. The airlines have taken several hundred aircraft out of their operating fleets to compensate for reduced passenger and cargo demand. This action affects the ability of the airlines to meet their Civil Reserve Airfleet commitments in time of war where the DoD operational needs would be greatest. Additionally, by June 2002, the airlines had reduced new orders of aircraft by as much as twenty-five percent of the June 2001 orders, and the number of aircraft on firm order is expected to continue to fall.[62] This reduction has a significant impact on the health of the aircraft production industry in the U.S., which the DoD exclusively relies on for production of its own fighters and transport planes. It is a fact that America relies on a healthy airline industry for its own economic health. Similarly, the DoD depends on a healthy airline industry to fight and win the nation's wars.

The ability of the DoD to win its wars also depends on a healthy maritime shipping industry. Unfortunately, the systemic economic decline of the U.S. commercial shipping industry has led to a merchant mariner shortage that puts the ability of the nation to operate during wartime at risk. The VISA program demonstrates how much the military relies on, and cooperates with, the U.S.-flag merchant fleet for cargo transport. In fact, the ships in the Ready Reserve Force (RRF) and the VISA program would transport more than 95 percent of the fuel, ammunition, and equipment required by U.S. forces in a major conflict. Also, DoD contingency plans could require the call-up of as many as 100 reserve sealift ships in a major crisis. However, current critical manpower shortages in the Merchant Marine would only enable the manning of approximately one-third of the reserve ships.[63] In a May 2002 Sea Power magazine article, the commander of the Military Sealift Command stated his concern "that there may not be enough mariners to crew the surge fleet during a large-scale activation."[64] The U.S. Maritime Administration and the DoD have entered into a cooperative effort to ease the mariner shortage. However, these efforts are almost entirely dependent on a resurgent U.S.-flag Merchant Marine,

a critically important element of U.S. national defense and one that serves to enable the military element of national power.

The problems in the airline industry and the Merchant Marine highlight the need to formally recognize in doctrine just how dependent the military element of national power has become on other sources of complementary capabilities. The description of the military element in Joint Publication 1 overlooks this dependence. Strategy must account for the socio-civic forces that empower and complement military forces. Joint doctrine mandates this accounting when it calls for the inclusion of interagency considerations in military assessments and the need for unified action between civil agencies and the military. Yet the doctrinal definition of the military element falls short of this inclusive, often mutually dependent relationship when it cites the military element as consisting of the "Military Services, U.S. Special Operations Command, and Defense agencies." Additionally, many of the socio-civic force capabilities that complement the military do not fall within the context of any of the other three elements of national power. The strategist, however, will have to consider these capabilities and the joint doctrine should serve as a guide to ensure that full consideration is given when developing assessments, estimates, and plans.

A FUTURE VIEW OF THE ELEMENTS OF POWER – OPERATIONAL NET ASSESSMENT

The DoD is in the process of formally revising how it views the socio-civic force capabilities of a nation and their relative importance as an element of power. One indication of this transformation is the current effort at U.S. Joint Forces Command (USJFCOM) to revise and redefine the variables that the strategist uses to determine a nation's relative power. The effort is known as Operational Net Assessment (ONA). According to the ONA concept, the diplomatic, informational, military and economic elements of power are expanded to include social and infrastructure elements, all six elements defining a nation's or adversary's war-making or warfighting capability.[65] The fundamental purpose of the ONA concept is the development of a base of knowledge about an adversary, either a nation-state or non-state actor, so as to gain a full understanding of the strengths and vulnerabilities of the "pieces" of its entire "system."

What ONA provides the strategist is an understanding of the adversary from a "systems perspective" and the relationships, dependencies, and individual and collective strengths and vulnerabilities of these systems. The ONA process uses a detailed understanding of an adversary to provide recommendations on the use of one's own resources to best influence or compel an adversary. It enables and streamlines the ability of the strategist to network with

counterparts outside the military to better analyze potential threats. The USJFCOM ONA concept is an indication that the elements of national power described in Joint Publication 1 and other sources are incomplete when defining a nation's bases of power. The social and infrastructure "elements," "pieces," "systems," "force capabilities," or whatever term one uses to describe them, are critical to the definition of a nation's strength and its ability to influence or compel, or resist the efforts of an adversary to do the same.

THE NEED FOR REDEFINITION

Redefining the "military element" as the "socio-military" element of power will ensure that the strategist takes full account of the force capabilities that the military and society has to offer in planning military operations designed to influence, compel or resist, or designing the force required to do each operation. The socio-military element will account for support that the military heavily relies on for the conduct of its operations. It will include the parallel, complementary efforts of CIA paramilitary teams, just as it will address the military's reliance on CRAF, the VISA program, and LOGCAP. It will assist the strategist in analyzing industry trends and economic indicators that might affect those industries upon which the military relies for successful execution of contingency operations. It will serve as a guide to the strategist charged with developing military force structure commensurate with military roles and missions. With this new element, the strategist can better recognize and assess the potential contributions of the commercial sector or other governmental agencies, and tailor the force according to what is available, and also according to the economic or social trends that may affect industry or government. Adopting this redefinition, the socio-military element, to capstone joint doctrine contained in Joint Publication 1 expands on the direction given in regulations and Service field manuals that military operations will be a cooperative effort with other governmental agencies and the private sector.

The socio-military element also better describes the relationship that the military has with other government agencies and the private sector when assessing the role that all play in homeland security. The elements of power defined in Joint Pub 1 apply, to some degree, in determining the ways and means available to secure the homeland and their relationship to one another. However, they are insufficient in their ability to address the roles that government, local through federal, and the private sector assume in securing the homeland. The elements are also inadequate in their accounting of the non-military capabilities that local, state, and national agencies and organizations maintain for defending against a threat to the homeland, or responding to the consequences of an attack against the homeland. The strategist can use the

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socio-military element of national power as a guide that will include all of these force capabilities and their sources when designing strategic ways to defend the homeland against externally or internally positioned threats. The socio-military element provides the strategist a construct he or she can use to develop operational concepts and force capabilities postulated in the <u>National Strategy for Homeland Security</u>. The strategist does so with a more comprehensive view of the capabilities existent within all levels of the government, how they are networked, and how they enable and complement each other.

CONCLUSION

The art of the strategist is to properly balance the elements of power so that a nation can achieve its national ends. To do so, the strategist must have a full and complete understanding of the elements of national power, and their respective intrinsic force capabilities. Doctrine, such as Joint Publication 1, provides a guide to understand the elements, however the U.S. joint doctrine is incomplete in its description of the military element and its accounting of the sources of force capabilities that reside in other governmental organizations or in the private sector. Joint doctrine addresses the need for inclusion of contractors, other government agencies, and NGOs and PVOs in military planning. However, the doctrine fails to recognize that many of these sources of force capabilities have in themselves become inextricably linked to the exercise of the military element. The U.S. military relies on other government agencies and the private sector for support. They serve as a complement to the military as it conducts operations across the spectrum of operations. These symbiotic relationships have increased dramatically since the Persian Gulf War, and they will continue to increase as this nation's leaders ask the military to lead the way in the global war on terrorism.

But the military, as capable as it is, does not lead the way in the domestic fight against terrorists. The strength of the United States to prepare for attacks against the homeland, to deter those attacks, and to recover from those attacks, lies not in the military, but in the social and governmental infrastructure of the nation. The private sector, local first responders, state emergency management agencies, and federal departments and agencies provide a network of capabilities in this country that is truly remarkable in its ability to secure the homeland. These organizations exist, as do their networks. Yet, the elements of national power provide little recognition as to their importance and contributions to the security of the United States. The elements detailed in Joint Publication 1 are outdated In this regard, and the U.S. Joint Forces Command's Operational Net Assessment effort to better define an enemy's "system" of power only serves to confirm this.

Thus, the strategist can employ a redefined military element of power – a "socio-military" element that accounts for the relative reliance that a military establishment has on its nation's private sector and other governmental agencies during contingency operations. The socio-military element of power includes the intra-national networks and infrastructure that makes a nation capable of deterring an enemy, or mitigating the effects of an attack against the homeland. It allows the strategist to not only consider the capabilities of the private sector or government at all levels in planning operations, but it requires the strategist to assess these capabilities when determining organizational structure. Armed with a more comprehensive way to gauge national power, the strategist can better apply the elements of national power and their respective elements.

WORD COUNT = 11,760

ENDNOTES

[1] In my research for this paper I have recognized that the military community uses the terms "elements" and "instruments" to describe national power, and does so interchangeably. For example, Joint Publication 1, Joint Warfare of the Armed Forces of the United States, uses the term "instruments" to describe the tools by which a nation applies its sources of power. The Army War College uses the term "elements" of power. What is consistent among both taxonomies is that they each use the same four elements/instruments to generally describe national power: diplomatic, economic, informational, and military. The Army War College's Distance Learning Course 521 comprehensively determines the difference between an "element" and an "instrument" of national power. An "element" of national power is composed of both natural (geography, population, natural resources) and social (diplomatic/political, economic, military, informational) "determinants." The elements of power are the basic "means" at the national level from which one can derive the resources for strategy. The "instruments" of power are subordinate components of the "elements" of power and are the theoretical, infinite number of policy options or tools derived from the elements. In the course of developing national strategy, the instruments are synonymous with the "ways" a nation applies its resources. However, even the faculty within the Army War College uses the term "elements" somewhat inconsistently. For example, the syllabus in the resident students' Course 2 lesson on "Grand Strategy II: National Power" describes national power in terms of natural "elements" and social "elements," as opposed to the distance learning course which uses the term "determinants" in place of "elements." And while each course recognizes both natural and social determinants at work in the national power equation, both courses focus their study on the diplomatic, economic, informational, and military elements – the social determinant vice the natural determinant. My point in this discussion is to highlight that the military is relatively inconsistent in describing national power. For the sake of consistency in this paper I will use the Army War College's terminology. Thus, my use of the term "element" will be synonymous with the Joint Pub 1 term "instrument" when describing national power.

[2] William Morris, ed., The American Heritage Dictionary of the English Language (Boston, MA: Houghton Mifflin Company, 1976), 422.

[3] Henry H. Shelton, Joint Warfare of the Armed Forces of the United States, Joint Publication 1 (Washington, D.C.: Joint Chiefs of Staff, 14 November 2000), I-6. As stated in endnote 1, I have substituted the term "element" for the word "instrument" that the Joint Pub 1 uses.

[4] Ibid, I-5 through I-8. Joint Pub 1 provides a more detailed description of each of the instruments of national power. The descriptions in this paragraph are a synopsis of those contained in the Joint publication.

[5] David Jablonsky, "National Power," U.S. Army War College Guide to Strategy, ed. Joseph R. Cerami and James F. Holcomb, Jr. (Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, February 2001), 90, 95-96.

[6] Shelton, vii-viii.

[7] John Spanier and Robert L. Wendzel, Games Nations Play (Washington, D.C.: Congressional Quarterly Inc., 1996), 142-144. The authors expand the factor of mobilization

and reinforcement of active duty forces to include the national will to use reserve forces, domestic political support of the nation's war effort or contingency operation, and the nation's economic capacity to support a prolonged conflict. Strategic leadership, as a qualitative factor of military strength, is composed of the ability of the nation's armed services to cooperate and conduct joint operations, the military establishment's degree of receptivity to innovation and change, military information processing and analysis, and the leaders' ability to conduct deliberate, sustained operations. Strategic leaders are able to visualize and anticipate future warfighting scenarios and their military requirements.

[8] Frederick H. Hartmann, <u>The Relations of Nations</u>, 5th ed. (New York: Macmillan Publishing, 1978), 62-65. Hartmann describes *industrialization* as a means of progress and ability by which a nation can allow its potential labor force to enter into military service without affecting labor outputs and markets. According to Hartmann, industrialized nations can also field and sustain more "mechanized" and "intricate" weapons and equipment and maintain a qualitative edge over adversaries.

[9] Hans J. Morgenthau and Kenneth W. Thompson, <u>Politics Among Nations: The Struggle for Power and Peace</u>, 6th ed. (New York: McGraw-Hill Publishing, 1985), 137, 139-142.

[10] Shelton, III-16.

[11] Department of Defense, <u>Doctrine of Logistics Support of Joint Operations</u>, Joint Publication 4-0 (Washington, D.C.: Joint Chiefs of Staff, 6 April 2000), V-1.

[12] Paula J. Rebar, Contractor Support on the Battlefield, Strategy Research Project (Carlisle Barracks: U.S. Army War College, 9 April 2002), 2-3.

[13] Congressional Budget Office, "Moving U.S. Forces: Options for Strategic Mobility," February 1997; available from <u>http://www.cbo.gov/showdoc.cfm?index=11&sequence=3.html</u>; Internet; accessed 21 November.

[14] United States Air Force, "Fact Sheet: Civil Reserve Air Fleet," May 1999; available from <http://ww.af.mil/news/factsheets/Civil_Reserve_Air_Fleet.html>; Internet; accessed 21 November 2002.

[15] Congressional Budget Office, "Moving U.S. Forces: Options for Strategic Mobility," February 1997; accessed 21 November.

[16] Military Sealift Command, "Navy/Maritime Industry Relationship," available from <http://www.msc.navy.mil/N00p/indrel.htm>; Internet; accessed 2 December 2002.

[17] Military Sealift Command, "Strategic Sealift Inventory," 1 November 2002; available from <http://www.msc.navy.mil/n35/monthly.htm>; Internet; accessed 26 November 2002.

[18] Department of the Army, <u>Logistics Civil Augmentation Program (LOGCAP)</u>, Army Regulation 700-137 (Washington, D.C.: U.S. Department of the Army, 16 December 1985), 3-5.

[19] General Accounting Office, "Contingency Operations: Army Should Do More to Control Contract Cost in the Balkans" (Washington, D.C.: U.S. Government Printing Office, September 2000): 5-6.

[20] U.S. Army, Europe, Operation Joint Endeavor, U.S. Army, Europe Headquarters After Action Report, Volume I (May 1997), 126-127.

[21] Department of Defense, Office of Assistant Secretary of Defense for Public Affairs News Release, "Contract Release Number: No. 550-96," 24 September 1996; available from <http://www.defenselink.mil/news/Sep1996/c092496_ct550-96.html>; Internet; accessed 26 November 2002.

[22] U.S. Army, Europe, 127-129.

[23] General Accounting Office, 7-8.

[24] Ibid, 5, 8-9.

[25] Ibid, 3.

[26] Donald H. Rumsfeld, Quadrennial Defense Review Report (Washington, D.C.: Department of Defense, September 2001), 53. The QDR addresses the need for the DoD to assess those tasks and functions that it can privatize or outsource, partially or entirely. In this regard, the Department would establish new partnering efforts with private firms or other public organizations or agencies.

[27] James E. Althouse, "Contractors on the Battlefield: What Doctrine Says and Doesn't Say," Army Logistician, 30 no. 6 (1998): 15.

[28] Department of State, "State Department Response to Question Taken from 30 October 2002 Press Briefing: Successful Completion of Military Train and Equip Program," 30 October 2002; available from <http://www.usembassy/it/file2002_10/alia/a2103001.htm>; Internet; accessed 26 November 2002.

[29] U.S. Institute of Peace, "Special Report – Dayton Implementation: The Train and Equip Program," September 1997; available from <http://www.usip.org/oc/sr/dayton_imp/train_equip.html>; Internet; accessed 26 November 2002.

[30] Military Professional Resources, Incorporated, "International Operations – Europe; Military Stabilization Program (Train and Equip) for the Federation of Bosnia and Herzegovina," available from <http://www.mpri.com/subchannels/int_europe.html>; Internet; accessed 26 November 2002.

[31] Robert K. Ackerman, "War Brings Intelligence Agency, Military Closer," Signal 57 (October 2002), 17.

[32] Ibid, 18.

[33] Ibid, 19.

[34] Central Intelligence Agency, "Director of Central Intelligence Annual Report to the United States Intelligence Community," February 2002; available from <http://www.cia.gov/cia/publications/Ann_Rpt_2001/smo.html>; Internet; accessed 27 October 2002.

[35] Daniel Moore, "CIA Support to Operation Enduring Freedom," Military Intelligence Professional Bulletin 28 (July-September 2002): 46-47.

[36] James Risen with Judith Miller, "CIA Is Reported to Kill a Leader of Qaeda in Yemen," New York Times, 5 November 2002, [database on line]; available from ProQuest; accessed on 26 November 2002.

[37] I did consider the significance of the socio-civic capabilities as indicative of possibly a fifth element of national power. However, through my research I have concluded that the socio-civic forces are becoming increasingly nested within the application of military instruments, especially in homeland security. Thus, the redefinition of the military element of power to a "socio-military" element of power was, in my opinion, the more appropriate course of action.

[38] George W. Bush, National Strategy for Homeland Security (Washington, D.C.: Office of Homeland Security, 16 July, 2002), 55-57.

[39] Ibid, 2.

[40] Ibid, A-1.

[41] Ibid, 12-13.

[42] George W. Bush, The National Security Strategy of the United States of America (Washington, D.C.: The White House, 17 September 2002), 5-6.

[43] Congress, House, Testimony as Delivered by Secretary of Defense Donald H. Rumsfeld before the House Select Committee on Homeland Security, 11 July 2002, 5-6.

[44] White House Press Secretary, "Supporting First Responders Strengthening Homeland Security," 24 January 2002; available from <http://www.whitehouse.gov/news/releases/2002/01/print/20020124-2.html>; Internet; accessed 9 December 2002. The President's 2003 Budget has targeted $3.5 billion in federal assistance for first responders.

[45] Census Bureau, "Statistical Abstract of the United States, 2001;" available from <http://census.gov/prod/2002pubs/01statsb/law.pdf> and <http://factfinder.census.gov/servlet/IQRTable?_ts=57506945941>; Internet; accessed 9 December 2002. Of the one million firefighters, approximately 750,000 are volunteers. The 932,780 law enforcement personnel are full-time employees of local and state police, and sheriff offices. Of this number, approximately 622,000 are sworn law enforcement personnel. The 7000 hospitals consist of taxable and non-taxable establishments.

[46] General Accounting Office, "Combatting Terrorism: Use of National Guard Response Teams is Unclear," GAO/NSIAD 99-110 (Washington, D.C.: General Accounting Office, May 1999): 2.

⁴⁷ General Accounting Office, "Combating Terrorism: Selected Challenges and Related Recommendations," GAO 01-822 (Washington, D.C.: General Accounting Office, September 2001): 59-60. Other federal agencies that provide key crisis management response teams include: Department of Health and Human Services (Domestic Emergency Support Team component, National Medical Response Team/WMD); Department of Defense (U.S. Army 52d Ordnance Group, U.S. Army Technical Escort Unit, Joint Special Operations Task Force); Department of Energy (Nuclear Emergency Search Team, Nuclear/Radiological Advisory Team, Lincoln Gold Augmentation Team, Joint Technical Operations Team); Environmental Protection Agency (Radiological Emergency Response Team); and, Bureau of Alcohol, Tobacco, and Firearms (National Response Team). As of 6 September, 2001, the FBI had a SWAT team in all but one of its 56 field offices.

⁴⁸ Ibid, 63-64, and U.S. Army War College, "How the Army Runs: A Senior Leader Reference Handbook," (Carlisle Barracks, PA: Government Printing Office, 15 May 2001), 23-10. The FEMA worked with 29 other federal departments and agencies to develop the Federal Response Plan (FRP). The FRP describes how the Federal government will provide resources and conduct activities to assist local and state authorities in coping with significant disasters. The FRP outlines Federal responsibilities and civil-military coordination requirements and procedures. The FRP may be fully or partially activated depending on the scope of an event and the needs of the supported state or local government. Along with FEMA, 27 other federal departments and agencies, and the Red Cross, participate in the provisions of the FRP.

⁴⁹ Congress, House, Committee on Budget, Restructuring Government for Homeland Security: Nuclear/Biological/Chemical Threats, Statement of Dr. Scott R. Lillibridge, Special Assistant to the Secretary for National Security and Emergency Management, Department of Health and Human Services, 5 December 2001, 2.

⁵⁰ Ibid, 2-3.

⁵¹ Ibid, 4.

⁵² Ibid, 5.

⁵³ Aaron Weiss, "When Terror Strikes, Who Should Respond," Parameters 31 (Autumn 2001): 7.

⁵⁴ Bush, National Strategy for Homeland Security, 12.

⁵⁵ Philip. A. Odeen, "Answering America's 9/11 Call: Homeland Defense and How the Private Sector Can Help Meet America's Number 1 Public Challenge," available from <http://proquest/umi.com/pdqweb?Did=000000122791601.html>; Internet; accessed 9 December 2002. Mr. Odeen is the Chairman of TRW, Inc.

⁵⁶ Bush, National Strategy for Homeland Security, viii.

⁵⁷ Richard B. Myers, National Military Strategy of the United States of America (Washington, D.C.: 19 September 2002), 14.

⁵⁸ Congress, House, Testimony as Delivered by Secretary of Defense Donald H. Rumsfeld before the House Select Committee on Homeland Security, 6.

[59] Leslie Wayne, "America's For-Profit Secret Army," New York Times, 13 October 2002, available from <http://proquest.umi.com/pdqweb?Did=000000209585001&Fmt.html>; Internet; accessed 27 October 2002.

[60] Air Transport Association, State of the U.S. Airline Industry: A Report on Recent Trends for U.S. Carriers, 2002-2003, available from <http://www.air-transport.org/public/ industry/bin/state.pdf>; Internet, accessed 20 January 2003. The report cites that the $7.7 billion loss in 2001 would have been worse were it not for federal compensation to the airlines for revenues lost in the unprecedented multi-day shutdown just after September 11, 2001. The report also states that airline insurance costs have more than tripled since September 11, adding as much as $1.2 billion to annual costs.

[61] Chris Meyer, "U.S. Airline Industry Must 'Restructure of Die,'" Aviation Week and Space Technology Reports, 18 November 2002, available from <http://www.mcgraw-hill.com/media/news/2002/11/20021119.html>; Internet, accessed 20 January 2003.

[62] Air Transport Association. According to the report, ATA member airlines had orders for 713 aircraft and options for 1,193 more as of 30 June 2002. In June 2001, the member airlines had firm orders for 955 aircraft and options to buy an additional 1,663. Given the state of the airlines, one can anticipate few new orders until the industry becomes profitable again. Most experts do not expect the industry to turn a profit any earlier than 2004.

[63] American Maritime Congress, "Manpower Shortage Serious Threat to U.S. Maritime Industry, National Security," available from <http://www.us-flag.org/manshorserth.html>; Internet, accessed 20 January 2003.

[64] Ibid.

[65] The description of Operational Net Assessment and the system-of-systems elements that ONA defines are found on the U.S. Joint Forces Command web page and are available at <http://www.jfcom.mil/about/glossary.htm> and <http:/www.jfcom.mil/about/ experiments/mc02/ ona.htm>; Internet; accessed 27 October 2002. The USJFCOM ONA concept does not associate the term "elements" to describe a nation's relative power. Rather, it defines a nation's "bases of power" and "war-making capabilities" using six "systems" (political [synonymous with "dipolmatic"], informational, military, economic, social, infrastructure), of which each are interrelated and form a "system of systems." What is very clear from the USJFCOM description of each system and their interrelationships is that they ultimately define a nation's ability to make war against an adversary, and by extension its relative national power to influence or compel, or to be resistant to the same.

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